

April 28, 2008

Hawes Spencer  
Editor and Publisher  
The Hook  
100 Second Street, N.W.  
Charlottesville, VA 22902

Dear Hawes:

I want to compliment you for writing and *The Hook* for publishing the April 3<sup>rd</sup> and April 24<sup>th</sup> articles on the controversy surrounding the Rivanna Water and Sewer Authority's proposed \$143 million water plan. You raised some very important issues which the community needs to understand.

Since the beginning of this debate, I have felt that it is a mistake not to dredge the South Rivanna reservoir. Furthermore, my instincts have been extremely uncomfortable with the concept of enlarging the Ragged Mountain dam and connecting the Ragged Mountain and South Rivanna reservoirs with a 9.5 mile pipeline.

I must preface my remarks by saying that my opinions are based on what I have read in the media and have heard in the community. I have not been privy to any of the technical discussions that officials of the Rivanna Water and Sewer Authority, City of Charlottesville and County of Albemarle have had regarding this subject. Nevertheless, it appears that the decision makers may have failed to ask the types of questions that prudent businesspeople ask when making tough decisions. Here are seven questions that initially come to my mind:

Why did the Rivanna Water and Sewer Authority seek a cost feasibility study for dredging from only one consultant? They hired a consultant, Gannett Fleming, to determine the cost of dredging. Their estimate was \$145 million. However, other parties believed the cost would be significantly less. A dredging contractor was willing to do it for \$21 million—85% less. Under these circumstances, prudent businesspeople would have commissioned at least one other cost study.

Was it a conflict of interest for Gannett Fleming to provide an estimate for dredging and be asked to design the dam? The Rivanna Water and Sewer Authority asked Gannett Fleming to compete for the design of the Ragged Mountain dam.

Obviously, if dredging was determined to be a good option, there may not have been a need to design a dam. As it turned out, Gannett Fleming was awarded a \$3.1 contract for dam design. Prudent businesspeople would have seen this situation as a potential conflict of interest. They would have commissioned a dredging feasibility study from a firm or firms that did not have a vested interest in the Authority's decision not to dredge.

What is the professional qualification of the Nature Conservancy for developing this plan? Apparently, an official with the Nature Conservancy devised it. According to its website, the Nature Conservancy's mission is "to preserve the plants, animals and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive." The Nature Conservancy performs this mission admirably. However, designing municipal water systems is not one of their core competencies. Prudent businesspeople would not have based a decision on a plan developed by an organization that did not have the appropriate expertise and experience.

Did the Nature Conservancy understand the full environmental impact of their plan? It has been reported that their plan calls for clear cutting 54,000 trees over 180 acres. Apparently, the Sierra Club now understands the plan's impact and is withdrawing its endorsement of it. Prudent businesspeople would have understood all aspects of a plan before adopting it.

How much money will local water customers pay and how large is the carbon footprint for the incremental electricity production? Little has been said about the energy needed to pump enormous quantities of water through a 9.5 mile pipeline and then up a small mountain. Prudent businesspeople would factor the financial and environmental costs of a plan that requires the use of so much electrical energy.

Has anyone in the decision-making process looked for creative as opposed to consultant-packaged, generic solutions? The best decisions are often based on creative, non-conventional ideas. For example, there is an abandoned stone quarry within walking distance of the South Rivanna reservoir's dam. It may be possible to buy the quarry and pump sediment into it. The dewatering of the sediment might occur naturally—the sediment would sink to the bottom and the water could be pumped off the top. Another non-conventional idea would be to buy the low-lying, river-front land that includes the old UVa polo field. Because it is in the Rivanna River's flood plain, this land probably has no development potential. Sediment could be pumped the short distance to it for drying and future sale. Prudent businesspeople would explore creative solutions like these.

What are the long-term ramifications of not dredging? Eventually, the reservoir would fill with sediment and become a giant swamp. If that were to happen, the public would demand a complex and costly remediation. Prudent businesspeople would consider long-term issues like this one.

Although the Rivanna Water and Sewer Authority's water plan may be flawed, I do applaud them for attempting to find a long-term solution for our water needs. As I understand it, if the South Rivanna reservoir is completely dredged, our water system would revert back to the capacity that it had 40 years ago. Obviously, we need to find ways to increase our water capacity. This goal is especially important considering the possibility of a reduction in average rainfall as a result of climate change.

As the Authority moves forward with its future planning, I hope that they learn to ask

the right questions.

Sincerely,

William G. Crutchfield, Jr.